

**REMARKS**

Claims 1-15 are pending in the present application.

Reconsideration of the application is respectfully requested in view of the following responsive remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

In the Office Action of October 12, 2006 the following actions were taken:

(1) Claim 1-5 and 12-15 were rejected on the grounds of non-statutory obviousness-type double patenting as being unpatentable over claims 1-3, 10, and 17-18 of U.S. Patent No. 6,932,466 (hereinafter "Payne '466"); and

(2) Claims 1-15 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over International PCT Publication No. WO 02/45971A1 (hereinafter "Payne '971).

It is respectfully submitted that the presently pending claims be allowed based on the remarks below.

**Double Patenting**

The Examiner has rejected claims 1-5 and 12-15 under the judicially created doctrine of double patenting over claims 1-3, 10, and 17-18 of Payne '466. It is worthy to note that even though the Examiner has used two different Payne references (the PCT and the U.S. patent), both were cited by the Examiner as failing to teach the same element, i.e. a required chlorine concentration of less than 400 ppm. The Applicant has responded with arguments in the following 103 section of this response regarding the collective teachings of Payne, including both Payne '466 and Payne '971, please see below. In light of those arguments, which are relevant to the claims of Payne '466, the Applicant submits that this rejection over Payne '466 is improper and therefore, the Applicant respectfully requests that this rejection be withdrawn.

**Rejections Under 35 U.S.C. § 103**

The Examiner has rejected claims 1-15 under U.S.C. § 103(a) as being unpatentable over Payne '971. The issue under § 103 is whether the PTO has stated a case of *prima facie* obviousness. According to the MPEP § 2142, the Examiner has the burden and must establish a case of *prima facie* obviousness. In order to maintain a *prima facie* case of obviousness by combining references, the prior art must provide some reason or motivation

to make the claimed compositions. *In re Dillon*, 16 U.S.P.Q.2d 1897, 1901 (Fed. Cir. 1990). As aptly stated in *In re Jones*, 21 U.S.P.Q.2d 1941, 1943-44 (Fed. Cir. 1992):

"Before the PTO may combine the disclosure of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art... Conspicuously missing from this record is any *evidence*, other than the PTO's speculation (if it be called evidence) that one of ordinary skill in the...art would have been motivated to make the modifications of the prior art necessary to arrive at the claimed (invention)."

It has been widely recognized that virtually every invention is a combination of elements and that most, if not all, of these will be found somewhere in an examination of the prior art. This reasoning lead the court, in *Connell v. Sears, Roebuck & Co.*, 220 U.S.P.Q. 193, 199 (Fed. Cir. 1983) to state:

"...it is common to find elements or features somewhere in the prior art. Moreover, most if not all elements perform their ordained and expected function. The test is whether the claimed invention as a whole, in light of all the teachings of the references in their entireties, would have been obvious to one of ordinary skill in the art at the time the invention was made." (underlining added)

With the above background in mind, the Applicant contends that a *prima facie* case of obviousness with respect to pending claims has not been met. Specifically, the references do not provide sufficient teachings or motivation to be modified in order to arrive at Applicant's invention. Further, Applicant contends that the combination of references is based on hindsight. Therefore, without knowledge of the disclosure of the present invention, one of ordinary skill in the art would not be able to make the combinations proposed to arrive at the claimed invention.

The Examiner has rejected claims 1-15 as being obvious over Payne '971. The Examiner has also rejected claims 1-5 and 12-15 over Payne '466 under an obviousness type double patenting theory. Thus, a brief discussion of these two references is believed to be in order.

*Payne '971 and Payne '466 (collective Payne)*

Payne discloses an ink-jet printing process comprising the steps of applying ink to a substrate and applying a fixing composition that contains a poly(C<sub>3-18</sub>-hydrocarbyl monoguanide). More specifically, Payne teaches (1) the fixing composition is applied in a localized manner; (2) the areas of ink and composition are substantially coextensive; (3) the polymonoguanide contains a plurality of groups represented by Formula 1 and/or 2; (4) the composition contains various percentages of polymer containing monoguanide, binder, water-soluble organic solvent, and water; (5) a substrate printed with an image, (6) a set of liquids suitable for use in an ink jet printer; and (7) an ink jet printer cartridge.

However, there are several deficiencies not taught by either Payne reference. First, the Examiner acknowledges that Payne does not teach that the fixing composition has a chloride concentration less than 400 ppm by weight. Second, Payne does not teach melt polymerization with a guanidine salt other than hydrochloride. Even though the Examiner has referred to page 4, lines 8-15, and the examples, a close inspection of Payne reveals that a hydrochloride salt is present. Specifically, page 4, lines 8-15 states that "PMGs may be prepared by the reaction of guanidine hydrochloride with a diamine . . ." (underline added). Also, the examples on page 14, line 30; and page 15, lines 4-12; clearly show that guanidine hydrochloride was used in all of the melt polymerization reactions schemes. Third, Payne does not teach the process of preparing a polymonoguanide from solvent polymerization of a C<sub>3-18</sub>-hydrocarbyl diamine with a guanidine salt other than guanidine hydrochloride.

Specifically regarding the obviousness rejections over claims 1-15, the Examiner has argued that the chlorine concentration is obvious since "it would have been obvious to one having ordinary skill in the art at the time of invention was made to incorporate chloride concentration less than 400ppm by weight, since it has been held that it is not inventive to discovering and optimum value or workable ranges by routine experimentation." See Office Action, page 7. However, based on the state of the art, it would have been impossible for one skilled in the art to achieve the present invention since Payne uses chlorine as part of its composition. Specifically, Payne uses chlorine salts while the present invention uses non-chlorine salts during polymerization. The absence of chlorine from the polymerization reactions enables the present invention to achieve such minimal chlorine concentrations. A person skilled in the art would never achieve such allegedly "optimum" chlorine concentrations based on the teachings of Payne. Since Payne clearly does not teach the

element that the concentration is less than 400 ppm, the Applicant submits that the present rejection is improper.

Therefore, in light of the above arguments, the Applicant submits that claims 1-15 are novel and respectfully requests that the Examiner withdraw the 103 rejection. Additionally, since neither the Payne U.S. patent nor the Payne PCT differs with respect to the required fixing chloride concentration requirement, the Applicant respectfully requests that the Examiner withdraw the double patenting rejection as well.

In view of the foregoing, Applicants submit that claims 1-15 present allowable subject matter and allowance is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be removed during a telephone interview, the Examiner is invited to telephone W. Bradley Haymond (Registration No. 35,186) at (541) 715-0159 so that such issues may be resolved as expeditiously as possible.

Please charge any additional fees except for Issue Fee or credit any overpayment to Deposit Account No. 08-2025.

Dated this 12<sup>th</sup> day of January, 2007.

Respectfully submitted,



Gary P. Oakerson  
Attorney for Applicant  
Registration No. 44,266

THORPE NORTH & WESTERN, LLP  
8180 South 700 East, Suite 200  
Sandy, Utah 84070  
(801) 566-6633

On behalf of:  
HEWLETT-PACKARD COMPANY  
1000 NE Circle Blvd., m/s 422B  
Corvallis, OR 97330-4239  
(541) 715-0159